



Alcimedes

Crack cocaine is being injected, rather than smoked, by an increasing number of drug misusers. This phenomenon is particularly worrying as it appears to be associated with more high risk behaviour, such as sharing needles and having unprotected sex, than with other intravenous drugs. In its non-ionized form, crack cocaine is not readily dissolved for intravenous use and weak acids (lemon juice, lime juice, vinegar and ascorbic acid) are often added to increase its solubility. The case report (*J Emerg Med* 2008;34:207–9) of a woman who developed infection and bilateral lower limb skin abscesses after skin popping with crack cocaine and lemon juice reminds us that this practice increases the frequency of such infections. Lemon juice when injected has also been associated with fungal endocarditis and endophthalmitis. In order to counteract these risks, the practice of making packets of sterile ascorbic acid available with needle exchange programmes has begun in the US. This is an attempt not only to decrease infection rates but also to decrease direct local tissue damage by virtue of the fact that ascorbic acid is gentler on the venous circulation than other weak acids.

Concern has previously been expressed in the pages of this journal about the practice of forcibly giving emetics to suspects who are alleged to have swallowed drug packages in order to retrieve the evidence. Alcimedes was interested, therefore, to read that a German doctor stands trial for the negligent manslaughter of a man in 2004 who died after being forcibly given an emetic to retrieve cocaine capsules (*BMJ* 2008;336:1039). It seems that the man vomited several times during the procedure but clenched his teeth tightly, resulting in the aspiration of gastric contents and death due to oxygen deficiency. The procedure of forcibly administering emetics in this way has subsequently been declared unlawful by the European Court of Human Rights. However, the doctor's lawyers are arguing that he was following guidelines that were in use at the time – even though the procedure had been condemned by the German Medical Association in 2002, when it declared that securing criminal evidence was a state procedure and that doctors could not be forced to participate.

A 78-year-old, heavily intoxicated, obese man who was found dead hanging in a head down position inside a blackberry bush (*Legal Med* 2008;10:204–9) appears to have been a case of positional asphyxia. The man had no pre-existing medical conditions that might explain his death and there were no external signs of third party violence. The death therefore met the criteria for positional asphyxia, namely: he was found in a body position that made normal breathing impossible or interfered with pulmonary gas exchange; he had inadvertently placed himself in this position (i.e. without the action of another person); there was a reasonable explanation for why he could not free himself (intoxication and tangled up in the bush); and other causes of death, natural and unnatural, had been excluded with a reasonable degree of certainty by the autopsy.

In primary healthcare settings, alcohol screening and brief motivational screening are now proven to reduce alcohol consumption. However, the value of these techniques is less clear in other settings such as emergency departments and the police custody environment. A study in a US emergency department compared the efficacy of emergency practitioner-performed brief intervention compared to simple discharge instructions in a group of hazardous/harmful drinkers (*Ann Emerg Med* 2008;51:742–50). There was a modest reduction in alcohol consumption in both groups with no significant difference in efficacy between those receiving brief intervention and discharge information. An accompanying review article (*Ann Emerg Med* 2008;51:751–4) highlights the fact that brief intervention has reduced alcohol consumption in some well-designed emergency department studies but not in others, and considers possible explanations. The authors suggest that further detailed research is required – something that applies equally well to the custodial environment.

A retrospective study amongst victims of intimate partner violence (IPV) found that perpetrators were more likely to have witnessed IPV as children and were also more likely to misuse metamphetamines, cocaine and alcohol (*Am J Emerg Med* 2008;26:592–6). Being aware of this correlation

may be important to the forensic physician by helping to identify IPV-related injuries and those requiring referral for substance misuse treatment.

Although *in vivo* research has demonstrated that a 5-s exposure to a Taser conducted electrical discharge in healthy subjects does not result in clinically significant changes in ventilatory function or of blood parameters indicating physiological stress, correspondence in *Ann*

Emer Med (2008;52:84–6) questions whether these ‘negative’ results may detract from the real safety issues surrounding these weapons. Reported deaths associated with Taser have predominately been amongst those with pre-existing cardiovascular disease, stimulant intoxication, or acutely agitated states. It seems unlikely that an ethics committee would ever approve *in vivo* research on the effects of Taser within this sub-group of individuals, so questions about the operational safety of Taser may remain unanswered by studies on volunteers.